

REMARKS/ARGUMENTS

Applicants respectfully request reconsideration and withdrawal of the outstanding rejections.

The objection to the specification requires clarification on the part of the Office. Specifically, it is indicated that “from line 23 on page 46 through line 7 on page 7 ...” Applicant is certainly willing to correct the disclosure to the satisfaction of the Examiner, but requests further guidance in this regard. The Examiner is invited to contact the below-signed attorney by telephone or, since it is believed that the present remarks place this case in condition for allowance, to correct the disclosure by Examiner’s Amendment after consultation with Applicant.

The obviousness rejections focus, primarily, on the microcavity semiconductor laser element and wave guide element of, e.g., Claim 1. While Applicants disagree with the assertions in the Official Action, it is respectfully submitted that no reference discloses or suggests the underlying “stack” structure comprising a monocrystalline silicon substrate, an amorphous oxide material in contact with the monocrystalline substrate, a monocrystalline metal oxide selected from a particular group contacting the amorphous oxide material, and an overlying monocrystalline compound semiconductor material. In this regard, Eisenbeiser is cited, but this reference relates to a high-K material, e.g., a gate oxide for CMOS technology. The Eisenbeiser reference does not disclose, suggest, or relate to a semiconductor structure comprising a monocrystalline compound semiconductor material. As the Examiner is aware, the present application is part of a “bulk” filing submitted originally by Motorola, and the Office has previously determined the patentability of the basic “stack” structure claimed here. SPE Baumeister, SPE Lee, etc., may be helpful in consultation.

Application No. 09/985,757

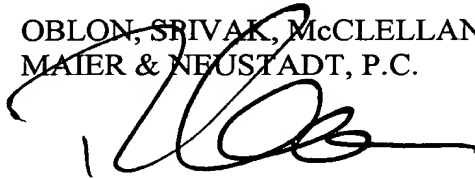
Reply to Office Action of January 28, 2005

Because the combination of references cited herein do not disclose or suggest the presently claimed embodiments, Applicants respectfully request the reconsideration and withdrawal of the outstanding rejections, and the passage of this case to Issue.

As noted previously in related cases, a substantive response to the Terminal Disclaimer issue is forthcoming.

Respectfully submitted,

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